Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Review of Regulatory Requirements for	)	CC Docket No. 01-337
Incumbent LEC Broadband	)	
Telecommunications Services	)	

COMMENTS OF THE NATIONAL TELECOMMUNICATIONS COOPERATIVE ASSOCIATION

The National Telecommunications Cooperative Association (NTCA) submits these comments in response to the Commission's Notice of Proposed Rulemaking in CC Docket No. 01-337.[1] NTCA submits that broadband markets, particularly in rural areas, are immature and respectfully requests that the Commission refrain from making sweeping regulatory changes without fully considering their impact on rural carriers. Regulatory flexibility is the key to the successful deployment of broadband services to rural America.

I. INTRODUCTION

NTCA is a not-for-profit association established in 1954. It represents more than 500 rate-of-return regulated rural telecommunications companies. NTCA members are full service telecommunications carriers providing local, wireless, cable, Internet, satellite and long distance services to their communities. All NTCA members are small carriers that are defined as "rural telephone companies" in the Telecommunications Act of 1996.

[1] Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services, Notice of Proposed Rulemaking, CC Docket No 01-337, FCC 01-360 (rel. December 20, 2001).

The vast majority of NTCA members are actively deploying advanced services to the communities they serve and are very much interested in the instant proceeding.

II. THE RURAL BROADBAND MARKET IS NASCENT

The Commission asks parties to comment to define the relevant product and geographic markets in which incumbent LECs provide broadband services.[2] However, the question is premature as it applies to LECs operating in rural areas. The market for broadband services in rural areas is in its infancy. Service providers are in the process of determining both what their customers want, and the most cost effective and efficient means of satisfying that demand. It is impossible to speculate what broadband services will emerge as "reasonably substitutable" for DSL in rural areas, or even whether DSL will be the choice provider of broadband.

Today, incumbent LECs' principal technology for broadband delivery to the residential market is DSL. However, NTCA member companies can choose from a number of platforms to provide broadband to their customers. DSL service allows for the provision of broadband over standard copper wire. Cable modem service utilizes coaxial cable to provide both cable television and broadband service. T1 (short for "Trunk Level 1") is a means of digital transmission, typically utilizing fiber optic lines that can deliver a total signaling speed of 1.544 million bits per second (Mbps). Fixed wireless systems consist of paired radio transmitters—at the customer premise, and at the central office. In this way, data is sent through the air, rather than over wires. Local multipoint distribution service (LMDS) and microwave multi-point distribution service (MMDS) are two types of fixed wireless services. Satellite communications utilize geostationary orbiting satellites to relay information between the customer premise and the central office.

While each of these platforms has beneficial properties that make it attractive to rural service providers, each also has inherent weaknesses that limit its rural applications. DSL performance, for example, is highly dependent on distance from the customer to the central office. Due to the greater distances between rural customers, many rural providers' loop lengths exceed the 18,000-foot distance beyond which the provision of DSL service is problematic. Cable modem service requires that a separate physical cable be run to each customer premise—again, an expensive undertaking due to the low customer density in rural areas. Offering T1 service requires laying fiber optic cable throughout the service area—an undertaking beyond the financial reach of many small telcos. LMDS, MMDS, and other fixed wireless services must contend with problems arising from the rugged terrain of rural areas. Satellite service, while certainly an attractive option for overcoming the difficult terrain problems that can plague fixed wireless, has problems of its own. Currently, there is no major satellite player that has stepped in to provide service to rural areas. And since provision of the service requires extremely large financial outlays, potential providers will require greater evidence of long-term viability before making such a commitment.

A recent survey of NTCA's members' broadband deployment activities, conducted in late summer 2001, paints a picture of an emerging market.[3] The survey defined broadband as "data and internet speeds in excess of 200 kbps in the downstream direction." Seventy-four percent of survey respondents indicated that they offer their customers downstream bandwidth in excess of 200 kbps; an additional 9% expect to do so by the end of 2002. One-third of respondents expected to offer broadband to all of

[2] NPRM ¶¶ 17-26

their customers by the end of 2001. Eighty-nine percent of survey respondents providing broadband offer DSL, 8% offer wireless, 7% T1, and 5% cable modems. Yet, as might be expected with such relatively young technologies, for the most part, broadband take rates among the customers of service providers remain extremely low. Four percent of those customers with cable modem broadband availability subscribe to the service; 3% of those with DSL availability subscribe; 2% of those with wireless broadband access subscribe; and 1% of responding companies' customers with T1 access subscribes.

As a consequence of these low take rates, service providers are compelled to carefully and cautiously plan future investment decisions and service offerings. Until these decisions are made, the rural broadband market cannot and will not begin the maturation process. This data demonstrates that it is too early to respond to many of the questions the Commission has with respect to markets. The Commission should therefore not assume that the analysis it applies to urban markets has any relevance to rural markets.

III. THE COMMISSION MUST BE CAREFUL NOT TO SACRIFICE RURAL BROADBAND DEPLOYMENT AS IT PURSUES BROADBAND COMPETITION

Many rural areas have only a few large volume business broadband users and there is a relatively small residential customer base. The residential areas are sparsely populated, driving the cost of deployment higher, and the return on investment lower. Therefore, the business case for deploying in rural areas is very different from what it is in urban areas. Dale Lehman, Ph.D., examined the unique challenges faced by rural

[3] "NTCA 2001 Internet/Broadband Availability Survey Report," December 2001. (Available online at www.ntca.org.)

broadband service providers in a recent NTCA white paper on the costs associated with competition.[4] Lehman finds that in rural areas,

> [t]he financial business case for extensive deployment of broadband services is weak, at best, absent specific high cost support for the necessary investment. That is, the outside plant and central office investments required to provide broadband services do not generally yield a sufficient return to be profitable (the exceptions are where these investments are relatively low due to relatively high population densities or short loop lengths – conditions not generally found in rural areas).[5]

Lehman found that unlike the areas served by large carriers, rural areas cannot support multiple broadband providers.

However, despite the lack of financial incentive, many rural companies are deploying broadband services widely and are using variety of technology to do so. This is best explained by the "desire of these companies to address the needs of the communities they serve."[6] Approximately half of NTCA members are organized as rural cooperatives, owned by their subscribers. These carriers feel a special obligation to provide the services their customers want, even if the business case is not optimal. Many of the rural providers that are providing broadband are doing so despite the weak business case in the expectation of a market developing in the near future. Any Commission actions that retard that development or further weaken the business case could, in the extreme, have the unwanted result of driving these providers out of business.

The Commission should be mindful of the realities of rural America as it considers significant changes to the regulatory environment. While it may be true that

[4] Dale Lehman, The Cost of Competition, Paper 3 of the NTCA 21st Century White Paper Series, National Telephone Cooperative Association, Arlington, VA (December 2000).
[5] *Id.* at 2.
[6] *Id.*

"no group of forms of technology will likely be able to dominate the provision of broadband services,"[7] the landscape is not yet defined.

IV. THE COMMISSION SHOULD AVOID SWEEPING REGULATORY CHANGES THAT MAY ADVERSELY AFFECT RURAL BROADBAND DEPLOYMENT

The Commission questions whether it should consider streamlined regulatory requirements for incumbent LEC provision of broadband services.[8] NTCA requests that the Commission be very flexible as it considers regulatory changes. A new regulation (or the removal of an existing one) that is anticipated to spur broadband competition in urban areas may actually impede deployment in some rural areas. Because of the inherent differences among small carriers, as the Commission recognizes, it is often appropriate to regulate large incumbent LECs and rural incumbent LECs differently. Any regulatory changes should be made with a clear understanding of how they will affect rural companies and the subscribers they serve.

A predictable and stable regulatory environment is essential for small incumbent LECs serving rural areas. The Commission can best ensure such an environment and promote investment by avoiding mandates and making it possible for small incumbent LECs to choose among regulatory options.

V. CONCLUSION

Rural incumbent LECs are rolling out broadband service to their subscribers at an impressive rate. However, rural deployment is difficult and expensive, and the returns on investment comparatively low. NTCA submits that it is imperative that the Commission

[7] SBC Petition for Expedited Rulemaking that it is Non-Dominant in its Provision of Advanced Services and for Forbearance From Dominant Carrier Regulation of Those Services, CC Docket No. 01-337, p.41 (filed October 3, 2001).
[8] NPRM, ¶38.

recognizes the differences between rural and urban carriers and refrain from making regulatory changes without contemplating their impact on still developing rural broadband markets.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I, Gail C. Malloy, certify that a copy of the foregoing Comments of the National Telecommunications Cooperative Association in CC Docket No. 01-337, FCC 01-360 was served on this 1st of March 2002 by first-class, U.S. Mail, postage prepaid, to the following persons.

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